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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,275	02/19/2004	Gary Tripp	D0932-00385	4232

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EXAMINER	
MATZEK, MATTHEW D	
ART UNIT	**PAPER NUMBER**
1771	

MAIL DATE	DELIVERY MODE
10/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,275	TRIPP ET AL.	
	Examiner	Art Unit	
	Matthew D. Matzek	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22,25-28,30-47 and 56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22, 25-28, 30-47 and 56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, see Remarks, filed 2/22/2007, with respect to claims 1-22, 25-47 and 56 have been fully considered and are persuasive. The rejection of claims 1-22, 25-47 and 56 in view of Zeng has been withdrawn. The rejection has been withdrawn because Zeng fails to teach the use of phenol/formaldehyde binder on the inorganic insulation fibers. Claim 29 has been canceled. Claims 1-22, 25-28, 30-47 and 56 are currently active.

Response to Amendment

2. The Declaration under 37 CFR 1.132 filed 2/22/2007 is sufficient to overcome the rejection of claims 1-22, 25-47 and 56 based upon Zeng et al. because Zeng fails to provide for the claimed phenol/formaldehyde binder on the inorganic insulation fibers.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 22, 25-28, 30-47 and 56 are rejected because claims 22 and 30-34 recite the limitation "said scrap glass fibers" in the body of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6-8, 15 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Bargo et al. (US 6,099,775).

Bargo et al. disclose a fiberglass insulation product and a process for making it. The insulation product comprises a mixture of about 20-80% fiberglass, 1-30% scrap nylon of

less than 6mm in length and 5-35% thermosetting resin (abstract). The fiberglass fibers have a diameter of from 5 to 20 microns and a length of from 0.25 to 5.00 inches [6-127mm]. Example 1 uses a phenol/formaldehyde thermosetting polymeric resin. The final cured product generally has a density of from 0.75-40 lbs/ft^3 [12-640kg/m^3] (col. 2, lines 10-24). The reference teaches the importance of providing an inexpensive insulation product using recycled raw materials that are economical in cost to produce (col. 1, line 51-53). The fibers and resin have been uniformly mixed to form a uniform article (col. 3, lines 1-15). The cured insulative product has a thickness of 0.125 to 3" thick [3.175-76.2mm] (col. 3, line 65-col. 4, line 3). Based upon the thicknesses and densities disclosed by Bargo et al. the insulative product may have a basis weight ranging from 39-48,824 gm/m^2. The nylon fibers act both as a fiber and a co-binder in the final product (col. 2, lines 5-10). Examiner has equated the claimed scrap inorganic insulation fibers to the fiberglass fibers of Bargo et al. because the term "scrap" does not lend any structural or composition limitations to itself and the plastic-containing bonding fibers to the nylon fibers.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 3-5, 9-22, 27, 30-47 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bargo et al. (US 6,099,775) as applied to claim 1 above, and further in view of Zeng et al. (WO 01/31131). Bargo et al. fail to disclose the use of bi-component binding fibers for use in fiberglass insulative product.

a. Zeng et al. disclose an inorganic fiber insulation product material comprising glass fibers and plastic containing bonding fibers (abstract). The addition of the multi-component polymer fibers to the primary glass fibers enhances the sound absorption properties of the acoustical insulation product (abstract). The insulative product may be covered with a facing material such as a film, foil or open mesh/scrim (page 5). The bi-component fibers may have a sheath-core orientation but are also available to have other structures such as side-by-side configurations. The glass fibers are generally made by the rotary process and typically possess diameters within the range of from about 3 to about 30 microns (page 6). The binder polymer component of the bi-component fibers bonds the glass fibers to one another and has a melting point that is lower than that of the principal polymer component. The sheath and core materials may both be thermoplastics and be of different formulations (page 7) or the same polymer with different formulations. Example 1 uses thermoplastic, bi-component fibers with a diameter of about 14.3 microns. The binding fibers are present at the exposed surfaces of the insulation product and as such the fibers would also act as binding fibers for the facing layers.

b. Since Bargo et al. and Zeng et al. are from the same field of endeavor (i.e. fiberglass insulative articles), the purpose disclosed by Zeng et al. would have been recognized in the pertinent art of Bargo et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Bargo et al. with the motivation of providing the article with binding fibers while not melting the principal polymer

component of the binding fiber as disclosed by Zeng et al, which provides the article with an enhanced degree of structural integrity.

d. Bargo et al. teach glass fibers diameter values that are within the claimed average diameter values, but do not teach *average diameter values* for said glass fibers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made fiberglass article of Bargo et al. with the claimed glass fiber average density, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

e. Claims 13 and 40 are rejected as it would have been obvious to one of ordinary skill in the art at the time of the invention to have to have replaced the monocomponent polymeric binding fibers of Bargo et al. with polymeric coated glass fibers. The skilled artisan would have been motivated by the desire to impart greater structural integrity to the binding fiber and also offering the article with greater insulative properties by providing the article with more glass fibers.

6. Claims 25, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bargo et al. (US 6,099,775) in view of Zeng et al. (WO 01/31131) as applied to claim 22 above, and further in view of Syme et al. (US 4,927,705). Bargo et al. and Zeng et al. fail to teach the use of a vapor barrier on the surface of the insulative article.

a. Syme et al. disclose the application of a vapor barrier for use with an insulative article to prevent the accumulation of moisture on the cold inner faces of the exterior

surfaces of the walls and roof (col. 1, lines 26-38). The vapor barrier may either a polyethylene film or an asphalt-coated building paper.

b. Since Bargo et al. and Syme et al. are from the same field of endeavor (i.e. insulative articles), the purpose disclosed by Syme et al. would have been recognized in the pertinent art of Bargo et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Bargo et al. with the vapor barrier of Syme et al. with the motivation of providing the article with a barrier that prevents the accumulation of moisture on the cold inner faces of the exterior surfaces of the walls and roof (col. 1, lines 26-38) as disclosed by Syme et al.

7. Applicant's arguments with respect to claims 1-22, 25-28, 30-47 and 56 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is 571.272.2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571.272.1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Examiner, Art Unit 1771

/Terrel Morris/
Terrel Morris
Supervisory Patent Examiner
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